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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,421	08/15/2001	Noah J. Ternullo	12078-139	1551

26486 7590 01/11/2006

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EXAMINER

SINGH, DALZID E

ART UNIT PAPER NUMBER

2633

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/930,421

Applicant(s)

TERNULLO ET AL.

Examiner

Dalzid Singh

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 29-33, 43-48 and 58-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7-11, 29-33, 43-47, 58-65 and 70-82 is/are rejected.
- 7) ☒ Claim(s) 3-6, 48 and 66-69 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 59 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 59 recites "means for receiving said signal to form a received signal; and means for passing said received signal to said handheld device physical layer;" It is not clear which element is for receiving said signal to form a received signal and which element is for passing said received signal to said handheld device physical layer.

Claim 64 recites the limitation " said broadcast XML element ". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 7, 8, 29-32, 43-47, 58-62, 65, 70, 71 and 75-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura (US Pub. No. 2003/0053177).

Regarding claim 1, Kawamura discloses transmitter for use in a network carrying a plurality of data bits, as shown in Fig. 11, said transmitter comprising:

a physical layer (1s or 1r);

a first link layer (1C);

means for providing at least a subset of said plurality of data bits (it is well known that data bit is provided for the communication device of Kawamura; see paragraph [0061]);

means for making said first link layer match a second link layer in a device (the handheld device (a) comprise of data link layer (1Ca) which is match to the first link layer(1C); see paragraph [0147 to 0148; 0158 to 0159]);

means for making said at least said subset of said plurality of data bits available to said first link layer (it is well known that data bits is available for the first link layer);

means for making said at least said subset of said plurality of data bits available to said first physical layer (the data bits is transmitted therefore it is available to the physical layer);

means for generating a signal comprising said at least said subset of said plurality of data bits (the system generated infrared signal ; see paragraph [0153]); and

means for transmitting said signal to said device in a format compliant with and receivable by said second link layer (the signal is transmitted to a device; see paragraphs [0179-0182]).

Kawamura shows wireless communications between different devices such as (a,b,c,d) and differs from the claimed invention in that Kawamura does not specifically

Art Unit: 2633

disclose that the device is a handheld device. However, it would have been obvious that the device could be a handheld device. One of ordinary skill in the art would have been motivated to do this in order to provide portable communication device.

Regarding claims 2, 30, 45 and 46, as disclosed in paragraphs [0179-0182], Kawamura discloses the matching first and second link layers are infrared data association (IrDA) compliant.

Regarding claims 7 and 31, on paragraph [0153] Kawamura discloses that the signal is an infrared signal.

Regarding claims 8 and 32, in paragraph [0006], Kawamura discloses that the diffuse infrared signal is well known.

Regarding claim 58, as shown in Fig. 11, Kawamura shows that the signal is unidirectional infrared.

Regarding claim 59 (as far as understood), as shown in Fig. 11, Kawamura shows the handheld device (a) is capable of receiving said signal containing a message over a communication medium, said handheld device, wherein said handheld device including:

- a handheld device physical layer (1ra);

- means for receiving said signal to form a received signal (the signal is received to form a received signal);

- means for passing said received signal to said handheld device physical layer (the signal is received by the physical layer);

means for passing said received signal from said handheld device physical layer (1ra) to said second link layer (1Ca); and

means for utilizing information contained in said received signal to accomplish a task (it is well known that the information contained in said received signal can be utilized to accomplish a task).

Regarding claim 60, as shown in Fig. 11, the receiving means is a bi-infrared communication interface.

Regarding claim 61, as discussed above, the signal is conveyed in a format compatible with said handheld device physical layer and said second link layer (see paragraph [0147 to 0148; 0158 to 0159]).

Regarding claim 62, as discussed above, the handheld device physical layer and said second link layer are infrared-data-association (IrDA) compliant (see paragraph [0147 to 0148; 0158 to 0159]).

Regarding claim 65, as discussed above, said receiving means is compliant with an infrared-data-association (IrDA) interface specification (see paragraph [0147 to 0148; 0158 to 0159]).

Regarding claim 74, Kawamura discloses transmission of infrared signal which is generated by modulating an electric light.

Regarding claim 29, Kawamura discloses transmitter for use in a network carrying a plurality of data bits, as shown in Fig. 11, said transmitter comprising the steps of:

formatting said at least a subset of said plurality of bits into a data signal (frame analysis can be considered as formatting; see paragraph [0145]);

making said data signal available to a second link layer (1Ca) compatible with said first link layer (1C) (see paragraphs [0179-0182]);

receiving said data signal at a second physical layer (1ra); and

making said data signal available to a transmitter for conveying to said communication interface (see paragraphs [0179-0182]);

Kawamura shows wireless communications between different devices such as (a,b,c,d) and differs from the claimed invention in that Kawamura does not specifically disclose that the device is a handheld device. However, it would have been obvious that the device could be a handheld device. One of ordinary skill in the art would have been motivated to do this in order to provide portable communication device.

Regarding claim 70, Kawamura discloses the steps of receiving said data signal at a first physical layer (1s) communicatively associated with said communication interface to form a received signal; passing said received signal from said first physical layer to said first link layer (1C); extracting information contained in said received signal (see paragraph [0145-0148]); and making said information available to a user of said handheld device.

Regarding claim 71, Kawamura differs from the claimed invention in that Kawamura does not disclose a plug-in, said plug-in for performing said extracting step and said making step. However, it would have been obvious to provide plug-in for extracting information.

Regarding claims 75 and 79, shown in Fig. 11, Kawamura show one computer node (1000) for carrying out the method according to claim 29.

Regarding claims 76 and 80, shown in Fig. 11, Kawamura shows one live communications network comprising at least one computer node (1000) according to the method of claim 29.

Regarding claims 77 and 81, shown in Fig. 11, Kawamura shows data signal embodied in electromagnetic signals traveling over at least one live communications network carrying information capable of causing at least one computer node in said at least one live communications network to practice the method of claims 29.

Regarding claims 78 and 82, shown in Fig. 11, Kawamura shows at least one computer readable medium having instructions embodied therein for the practice of the method of claim 29.

Regarding claim 43, Kawamura discloses transmitter for use in a network carrying a plurality of data bits, as shown in Fig. 11, said transmitter comprising the steps of:

making a first link layer (1C) in said transmitter match a second link layer (1Ca) in said handheld device (see paragraph [0145-0148]);

providing said at least said subset of said plurality of data bits (it is well known that data bit is provided for the communication device of Kawamura; see paragraph [0061]);

making said at least said subset of said plurality of data bits available to said first link layer;



receiving said at least said subset of said plurality of data bits at a first physical layer (1s) in said transmitter;

generating an infrared signal comprising said at least said subset of said plurality of data bits (see paragraph [0153]); and

conveying said infrared signal to a communication interface associated with said device in a format compliant with and receivable by said second link layer (1Ca); (see paragraph [0145-0148]);

Kawamura shows wireless communications between different devices such as (a,b,c,d) and differs from the claimed invention in that Kawamura does not specifically disclose that the device is a handheld device. However, it would have been obvious that the device could be a handheld device. One of ordinary skill in the art would have been motivated to do this in order to provide portable communication device.

Regarding claim 44, as shown in Fig. 11, Kawamura show that the communication interface is a bi-directional communication interface.

5. Claim 9, 11 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura (US Pub. No. 2003/0053177) in view of Zaudtke et al (US Patent No. 6,654,816).

Regarding claims 9 and 47, Kawamura discloses infrared communication system and differs from the claimed invention in that Kawamura does not disclose that the signal has a wavelength in the range of substantially 850 nanometers to 1250 nanometers. Zaudtke et al is cited to show infrared communication system using

wavelength in the range of substantially 850 nanometers to 1250 nanometers. In col. 11, lines 17-31, Zaudtke et al teach the use of infrared light at approximately 980 nanometer wavelength. Therefore, it would have been obvious to an artisan of ordinary skill in the art to provide wavelength in the range of substantially 850 nanometers to 1250 nanometers.

Regarding claim 11, as discussed above, Kawamura transmit infrared signal, it is well known that the signal is generated by modulating an electric light.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura (US Pub. No. 2003/0053177) in view of Zaudtke et al (US Patent No. 6,654,816) and further in view of Inoue et al (US Pub. No. 2004/0077351).

Regarding claim 10, the combination of Kawamura and Zaudtke et al discloses infrared communication system between devices using markup language such as HTML (see col. 13, lines 3-23 of Zaudtke et al). The combination differs from the claimed invention in that the combination does not disclose the use of an XML element as part of the signal. Inoue et al is cited to teach the use of XML (see paragraph [0136]). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide XML to the system of the combination in order to identify type of packet used in data transfer.

7. Claims 33, 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura (US Pub. No. 2003/0053177) in view of Inoue et al (US Pub. No. 2004/0077351).

Regarding claim 33, Kawamura discloses infrared communication and differs from the claimed invention in that the Kawamura does not disclose the use of an XML element as part of the signal. Inoue et al is cited to teach the use of XML (see paragraph [0136]). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide XML to the system of the Kawamura in order to identify type of packet used in data transfer.

Regarding claim 63, Kawamura discloses infrared communication and differs from the claimed invention in that the Kawamura does not disclose that the signal includes a broadcast XML element containing said information. Inoue et al is cited to teach the use of XML (see paragraph [0136]). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide a broadcast XML to the system of the Kawamura in order to identify type of packet used in data transfer.

Regarding claim 64 (as far as understood), Kawamura discloses infrared communication and differs from the claimed invention in that the Kawamura does not disclose the signal contains an integrity XML element. Inoue et al is cited to teach the use of XML (see paragraph [0136]). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide a XML

Art Unit: 2633

element to the system of the Kawamura in order to identify type of packet used in data transfer.

8. Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura (US Pub. No. 2003/0053177) in view of Chase, Jr. (US Patent No. 5,974,238).

Regarding claim 72, as discussed above, Kawamura discloses communication of infrared signal between devices encoded in an infrared-data-association (IrDA) compliant and differs from the claimed invention in that Kawamura does not disclose that the operation of said handheld device is modified upon processing said information. Chase, Jr. is cited to show modifying operation of handheld device upon reception of information from desktop. (see Fig. 10). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify operation of handheld device. One of ordinary skill in the art would have been motivated to do such in order to synchronize different devices.

9. Claim 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura (US Pub. No. 2003/0053177) in view of Chase, Jr. (US Patent No. 5,974,238) and further in view of Lowery (US Patent No. 6,446,111).

Regarding claim 73, the combination of Kawamura and Chase, Jr. differs from the claimed invention in that the combination does not disclose that the information is processed by a plug-in running on said handheld device. Lowery is cited to show

handheld device requiring plug-in (see col. 2, lines 19-22). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide plug-ins to the handheld device in order to transmit or receive information.

***Allowable Subject Matter***

10. Claims 3-6, 66-69 and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weiser et al (US Patent No. 5,982,520) is cited to show personal storage device for application and data transfer.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalzid Singh whose telephone number is (571) 272-3029. The examiner can normally be reached on Mon-Fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2633

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DS

January 4, 2006

*David Singh*